

## Response to 05-235: CW Testing should be Retained

As long as CW modulation is allowed spectrum use, it is in the Government's interest to ensure competency in the use of this mode.

### Why should CW modulation mode be examined? *Efficient Spectrum Use.*

Minimum CW competency is required to maintain efficient use of allocated spectrum: Learning CW on the air would not be efficient. Extremely slow QSO's (less than 5 words per minute) would not be efficient. Nor would error-laden transmissions be efficient. Incorrect implementation of CW modulation (e.g. in SW Defined Radios) can cause "key clicks" which waste precious spectrum – particularly if the spectrum available for CW operation is significantly reduced.

With VE based testing and FCC's automated licensing system, very little or no measurable FCC resources are required for to ensure minimal competency at some level of licensing for this mode.

### Why should this mode be allowed spectrum access at all? *Precedent.*

A very strong precedent has been set in State Law for resource allocation to "antique" technology. Many states provide special hunting seasons for bow hunters, black powder rifle hunters, and modern firearms hunters. As bows and black powder rifles are unarguably antique technologies, so the CW modulation mode is or is becoming antique technology. Thus the precedent for bow and black powder hunting applies.

### What resources should be allocated to the CW modulation mode? *Spectrum.*

As a season (time) is the critical resource allocated for hunting, so band space (spectrum) is the critical resource for radio communication. Using the precedents established for hunting seasons, spectrum should be allocated for the antique CW communication modulation mode.

### Why allocate unique spectrum? *Incompatibility with modern modes.*

Special hunting seasons were not arbitrarily established. They were established because use of modern firearms is incompatible with bow and black powder use, which require hunters to be much closer to game. Perversely, because antique CW modulation is so efficient, modern modulation techniques are not compatible with it. By analogy, spectrum allocated for the antique CW communication mode should be distinct from modern modulation mode spectrum.

### How much spectrum? *Substantially less -- 50 to 100Khz per band.*

World wide, day to day, CW operations requires no more than 50Khz of Band Space per band; however international contests require at least 100Khz

**Only the FCC has the authority to safeguard our heritage.**

**Please protect it!**